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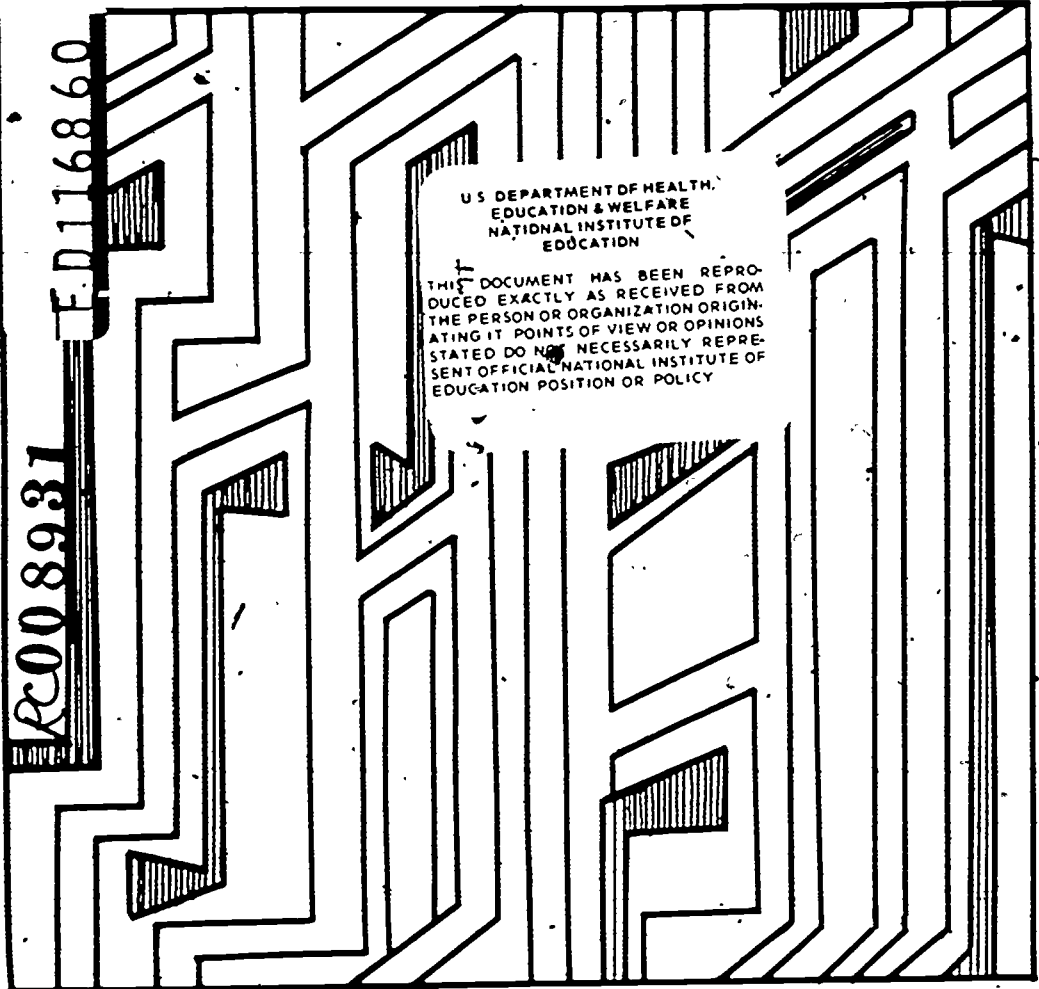
ABSTRACT

Summarizing research conducted under the Western Regional Research Project on the delivery of rural community services, this report presents explications of the following generalizations which have been supported by research: (1) Many rural service institutions need reorganization and renewal, (2) Regionalization increases organizations' ability to provide some rural community services, (3) Rural development depends directly on citizen participation and representation of various population segments, (4) Effective leaders view development as a community process, not a personal one, (5) Public leaders seem to be drawn primarily from certain community segments, (6) Even with fewer and less adequate services, rural residents prefer rural life, (7) Availability of health-care services affects their use, (8) Rural people want innovative health care practices, (9) Mechanisms are needed for using results from rural community service research. Additionally, the following future research needs are identified: (1) the construction and testing of social indicators, (2) perspectives on the adequacy of community services, (3) the study of the effectiveness of alternative organizational structure, (4) comparative analyses of service delivery systems and leadership structures, (5) the composite of community services appropriate for rural areas. Twenty-nine abstracts of research under the W-114 project are presented in the Appendix. (JC)

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Delivery of Rural Community Services: Some Implications and Problems



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SUMMARY

This report summarizes regional research on the delivery of rural community services. Generalizations and policy implications based on research findings are

- Many rural service institutions need reorganization and renewal
- Regionalization increases organizations' ability to provide some rural community services.
- Rural development depends directly upon citizen participation and representation of various population segments.
- Effective leaders view development as a community process, not a personal one.
- Public leaders seem to be drawn primarily from certain community segments
- Even with fewer and less adequate services, rural residents prefer rural life
- Availability of health-care services affects their use.
- Rural people want innovative health-care practices.
- Mechanisms are needed for using results from rural community service research

Future needs in rural community services research are also discussed. The appendix contains abstracts of research under the W-114 project.

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Delivery of Rural Community Services: Some Implications and Problems

Garrey E. Carruthers, Eugene C. Erickson, and Kathryn N. Renner

The President's Task Force on Rural Development (1970), the Joint Task Force of United States Department of Agriculture and State Agricultural Experiment Stations (1968), and many other sources have stressed the acuteness of service delivery problems in rural areas. The absolute loss of population in many areas, the selective loss of 20-to-35-year-olds as a group in others, and the decline in opportunities for people in rural areas to earn reasonably good incomes, all interfere with the provision of adequate medical, educational, and other community services.

Changing social and economic conditions have also increased demands upon public and private agencies for additional needed services. To the extent that the services are available only in large urban centers and that organizations are inadequate to handle increased demands, the problems people face can be serious.

Many influences create the conditions in which services are inadequate. Low population density makes services expensive to deliver. An area may lack the economic resources to support an adequate service system. The services may be organized inefficiently or actually to prevent their delivery in rural areas. For example, when medical services are organized to encourage the centralization of medical specialists in large hospitals, drawing all doctors toward them, it is difficult or, as some areas have found, impossible to get even general practitioners to live in the country. Also, when organizations are viewed as sets of relationships, forming patterns among and between specific service delivery systems, it is easy to imagine that some patterns (organizations) are better suited to the delivery of services than others. Researchers have often discussed the idea in narrower terms. They have been more interested in the correspondence between the intended and the actual product. The term "organization" in that context has been used to

refer to the coordination of intentions and actions which will improve that correspondence.

This regional research has attempted to document the conditions under which services are decided upon, organized, and delivered. It therefore includes consideration of the pattern of service delivery, the structure of the organizations responsible for creating and providing services, and the more abstract patterns of relationships within a community or multi-community system that seem to enhance service delivery.

Project Objectives

The objectives of the regional project were to: 1) identify the configurations of institutional structures, including the elements of the economic, demographic, and social organization which affect provision and delivery of community services; 2) define objective measures (indices) of adequacy of the several community services; 3) determine the existence and adequacy of community services provided in selected rural development areas; 4) determine the relationships between the configurations of institutional structures, as determined in objective 1; and the existence and adequacy of community services, as determined in objective 3, especially those relationships which affect the provision of these services; and 5) identify policies, alternative patterns of organization, and conditions which are requisite to effective planning and coordinating delivery of community services.

Purpose of this Report

This bulletin presents generalizations based on research findings from the project. These should be useful to people involved in developing community services. For other researchers, the publication contains research needs indicated by the findings.

The appendix contains abstracts of W-114 research which are cited in the report. The abstracts are numbered and are in alphabetical order, by state and author, and are cited accordingly.

GENERALIZATIONS SUPPORTED BY RESEARCH

Many Rural Service Institutions Need Reorganization and Renewal

Underlying many deficiencies of rural community services are institutions that are not responsive to their community needs. They lack systems of organized activity capable of expressing a community will and of generating action to solve problems and meet community needs. They lack means of influencing state, regional, and national decision-making.

Three observations can be made from the data of this study. They concern citizen participation in organizations and its implications, the relationship between rural leadership, especially the elected leadership, and its constituencies; and the implications of participation in the various forms of New Federalism

Citizen Participation in Organizations Is Important

From comparative data in a study of three communities in Mississippi, Reddy and Kaufman found that the community with the highest level of development had more people participating in developmental programs, and those who were involved participated at a higher level (8). This community, standing in sharp contrast with the other two communities, was the one which had developed more linkages to the larger urban system. It had more organizations in which people could and did promote development.

Past research has shown that participation increases in communities with higher levels of education. The observations are consistent. As an entire county and its communities become more isolated, with more hinterland, they tend to lose linkages; population growth and economic development are slowed; indeed, that elusive concept called "the quality of life" is affected adversely.

Rural Political Systems Need Closer Ties with Other Systems

Rural governments are often weak. Especially as political systems must relate to ever more sparse populations, contact and interaction between governments and citizenry seem to decrease (18). Fujimoto and Zone discussed the extent to which rural areas are being pressured by structural changes, i.e., changes in ownership patterns, in laws that create favorable status conditions for certain classes (2). The need for interrelations between government systems and voluntary organizations was again verified by Reddy and Kaufman (8). They found that the organization and leadership structure promotes development when there is a balance in participation and cooperation between voluntary associations and government agencies. Their data suggest that strong and viable voluntary organizations are essential for sustained development.

Similar results were found in a study of a seven-county federation in south-central Montana (10, 13). Public acceptance and the effectiveness of the multi-county federation were limited because the federation had failed to involve all relevant organizations and agencies within the multicounty area. The leadership of the federation was judged to be over-representative of rural, agricultural interests, although 70 percent of the population in the area resided within an urban trade center.

New Federalism Needs Local Participation

Preston and Guseman pointed out that the arena in which planning occurs is directly related to the type of sponsoring agency, be it federal, state, or some variant of local, and that this type, in turn, affects the extent of local participation (24).

One cannot assume that the existence of an active state agency concerned with development necessarily assures initiation or maintenance of structural conditions conducive to development. The development concept itself should probably include the variable of people's involvement in decisions that affect their lives. This point is apparent in many of the studies. Williams and Lassey's Montana research on multicounty development areas indicates that when citizens become dissatisfied with existing local, state, and federal programs designed to meet area-wide needs, grass-root efforts are initiated to develop a regional organization which could be more responsive to citizens (14). When such regional organizations are locally initiated and controlled, citizens identify with them more readily, participate more extensively, and develop programs more responsive to the felt needs of the citizenry.

Regionalization Increases Organizations' Ability to Provide Some Rural Community Services

Reasons for Regional Organizations

McEntire asserted that regionalism results from structural weakness in local government: local governments are frequently too small to cope effectively with modern problems, in that they lack both financial and technical resources; and jurisdictional boundaries make a poor fit with the geographical shape of problems and social needs (1). There is a need to define service areas appropriate to particular types of community services, and to adapt governmental and other institutions to these service areas. Similar ideas were stated by Williams and Lassey; they concluded that there is an explicit recognition of the inadequacies of the boundaries of many existing governmental units (14). They urged the development of new kinds of jurisdictional areas, such as new governmental groupings and councils of old governmental jurisdictions. Preston and Guseman, in their report on development of multicounty areas in Texas, cited the following purposes (reported by various agencies) for implementing multicounty organizations: 1) to comply with federal and state regulations, 2) to satisfy local interests, 3) to receive state and federal funding, 4) to facilitate administration, 5) to localize services (from a statewide to areawide base), 6) to overcome overlapping and independent efforts, and 7) to overcome outdated means of coping with many diverse problems (24). Williams and Lassey concluded that regional organizations can meet the needs of people dissatisfied with existing local, state, and federal agencies and programs.

Representation and Participation Needed for Effective Regional Structures

Williams and Lassey suggested effectiveness of regional development organizations is reduced if urban areas are underrepresented and if the development organization does not have a wide and diverse constituency (14). Reddy and Kaufman's research in Mississippi affirmed this in that they found the most effective structure for development of community services involved a balance in participation and cooperation between voluntary associations and government agencies (8). Insofar as possible, the program should represent all ethnic classes and resident (rural and urban) groups, and there should be a high volume of participation of individuals among programs.

Effectiveness of Regional Organizations Has Many Components

Oberle and Stowers evaluated the impact of regional organizations on local areas in Texas (22). They found that numbers of regional development structures with jurisdiction in a county are negatively related to per capita income, but positively related to per employee wages paid. Although tentative, this conclusion implies the necessity for reexamining the impact of regional organizations, such as councils of governments and economic development districts, on county resident incomes. Williams and Lassey suggested that the effectiveness of regional planning and development groups is influenced by the processes or procedures by which the regional organization is developed and implemented (14). They designed an organization model for regional planning and development and outlined steps for effective regional development. Reddy and Kaufman found success for regional programs depends upon high levels of interaction between external development agencies (such as comprehensive mental-health programs) and local development groups (such as chambers of commerce, industrial foundations, and community development associations) (8). Thus, as Williams and Lassey indicated, it takes more than just a new structure. One must also be concerned with the procedures by which new organizations are formed.

Regionalization Has Economic Advantages

Saywell demonstrated the financial advantages of regionalizing hospitals in rural Colorado (4). He concluded that the optimum-sized hospital should maintain between 150 to 500 beds and should be located within a region so as to minimize patient-access cost. Saywell asserted that all 17 rural hospital districts studied have excess capacity (in hospital beds) and that establishing a single, optimally located hospital for each region would save \$1.9 million to \$5.5 million in costs, depending upon the region.

The Problem of Effectiveness Includes Institution Building and Renewal

One should not infer that just providing arrangements so that people can participate or belong is enough. A corollary must include the actual organization of new structures and revitalization of existing structures to provide for realities of modern requirements (1). The obverse of a suggestion that new regional structures are needed raises questions concerning the precise effectiveness of local government and voluntary structures (8). Documentation of effectiveness of such structures is needed.

Rural Development Depends Directly Upon Citizen Participation and How Well Leaders and Organizations Represent Population Segments

The concept of institution building and renewal is complex. It includes the ideas of representation and the degree to which people feel they have an opportunity to influence or control their world. Many variables affect the quality of representation and the satisfaction people have with their world. Studies in this section have comments on both dimensions.

Citizens Must Participate for Development to Occur

In a comparison of rural development programs in three communities in Mississippi, Reddy found that the town with the most effective development programs had the greatest volume of citizen participation (60). Erickson suggests that participation increases with community complexity, communities with higher levels of education and with more organizations have greater participation than less complex towns (18).

In a study of a seven-county development federation in south-central Montana, Williams, Gilchrist, and Lassey noted that the effectiveness of the multicounty organization was hindered by the absence of widespread participation in the federation (13). Although 70 percent of the population lived in the major urban trade center, only one-third of the federation representatives were urban. The authors asserted that the rural federation leaders failed to recognize the importance of working with urban leaders, and that the rural development programs would have been more effective if the urban area leadership had been more heavily involved.

Regional Rural Development Organizations Must Represent Their Constituencies

Oberle, Stowers, and Darby defined development as "a process in which increasingly more members of a given area or environment make more socially responsible decisions, the probable consequence of which is an increase in the life

chances of some people without a decrease in the life chances of others" (23). Since it is difficult in our society for citizens to participate effectively in all the issues of concern to them, it is imperative that leadership represent their interests. In a study of regional organizations in Montana, Williams and Lassey discussed the need for representativeness of the local citizenry in various processes in which a regional organization is involved (14). The authors pointed out that planners of a multicounty organization must be concerned with the compatibility and congruence of their goals with local interests and concerns. Citizen involvement in all regional organizational processes is necessary, especially in planning, goal-setting, communicating with the public, and coordinating with established governmental structures.

The underrepresentation of one population segment can inhibit development programs. Reddy and Kaufman discovered that, in Mississippi communities, the better a total population was represented in the leadership structure, the larger was the volume of community programs (8).

Effective Leaders View Development as a Community, not a Personal, Process

Traditional Local Leaders Inhibit Change

In a study of leadership in a seven-county development organization in south-central Montana, Williams, Gilchrist, and Lassey classified the leaders into three major types (13). These were the "satisfied traditional," who seemed satisfied with current leadership actions, the "antigovernment pessimist," who doubted that either federal or local government could meet the needs of people, and the "development-oriented activist," who emphasized progressive development programs. The majority of local leaders were the "satisfied traditionals," who clung to the status quo and whose actions inhibited progress of the multicounty program. In a related paper, Williams and Lassey concluded that the status quo orientation of local leaders can be overcome by the development of strong regional organizations led by progressive-oriented influentials (14). In a related point, Reddy and Kaufman asserted there is a need to initiate and strengthen leadership training in development programs (8). Emphasis should be on coordination, conflict management, and problem resolution.

Progressive Leaders Have Broad Policy Orientations and Histories of Success

In the Montana studies, the multicounty organization leaders were classified as "development-oriented activists." In a single county in upstate New York, Erickson and John developed a somewhat similar classification of leaders (19). There too, some of the leaders were distinctly more policy-oriented than others and were involved in a wider array of issues and programs. Policy orientation

was clearly correlated with participation in nearly all sectors of the leadership system.

In the Mississippi study of three communities within development regions, Reddy and Kaufman found that effective relationships between the local volunteer leaders and the agency specialist facilitated development (8). They found that the more active the leaders, the more likely they were to be recognized by community members. Similarly, in the New York study, the degree of interpersonal contact among public leaders was directly related to the degree of influence, i.e., those with high influence had significantly more interaction among themselves and with others than those with less influence (19).

In the most active of the three Mississippi communities, three styles of sponsorship of development programs by coordinating agencies were reported (6). In one, the coordinating agency created a committee or organization and continued to give it support. A second approach consisted of autonomy after initial sponsorship of a program. In the third approach, persons active in development programs organized a new agency without any official support from the coordination organization. The most active community, the one with the greater volume of activity and of community participation, and the one in which the programs were more comprehensive used all three styles. In the other two communities, only the committee system was used.

This same study observed the scope and extent of participation. ("Scope" refers to the number of interest areas in which participants acted; "extent" is measured by the number of programs in which respondents participated.) It was observed that in the community with the more comprehensive development programs, participants had a wider scope and a much-broader extent of participation than in the other two communities. The New York study also showed a positive relation between influence rating and number of public problems in which a person was involved (19). Furthermore, the higher the influence rating, the higher the degree of involvement. It also showed that those with a higher influence rating tended to be more involved in all phases of public problems—their planning, supporting, and implementation.

Public Leaders Seem to Come Primarily from Certain Community Segments

A Profile of Leaders

A profile of the characteristics of persons named as public leaders was drawn from data on formal leadership patterns from Mississippi, Montana, New York, and Texas (9, 13, 19, 21). The profile is suggestive rather than definitive, since characteristics do not appear uniformly in the reports. In the profile, the social level of the leader was influenced by occupations, particularly in the business section, a high income, and politics consistent with historical dominance. Leadership systems were predominantly male. In life cycle, leaders tended to be middle-

aged and older but short of retirement and married. In ethnic status and religious affiliation, they also represented a historical dominance in the community. Their family social level showed that the leaders' fathers had been active in community affairs and that the leaders had a high degree of localism, i.e., long residence in the community. It might be mentioned that a Mississippi study was also made of leadership continuity over an eight-year period in two communities (9). Forty percent of the leaders in one community remained active, in the other community only one-tenth were recognized after eight years.

Leaders are not seen as a homogeneous group. Among the valued dimensions of leadership are leaders' backgrounds and their interpersonal interactions; to some extent, their characteristics lead to a subtle division of labor among them. In the Montana study, Williams, Gilchrist, and Lassey documented the attitudinal orientations of leaders involved in a seven-county federation (13). They concluded that the extent to which leaders are either "status quo" or "progressive-action" oriented determines the type, influence, and effectiveness of multicounty development programs. In the study of a rural county in upstate New York, leaders were subdivided into three interaction sets (19). Some leaders were noted chiefly for their involvement in city affairs. Others, often elected officials and public-minded citizens, were involved on a broader level; these were informally called the county group. Leaders in the third set were involved still more broadly with politics and with general questions of public policy in a wide area.

Leadership Visibility Varies

Another issue in leadership is the extent to which leaders are visible to many people in the community. Preston, Spiekerman, and Guseman found that in smaller, self-contained communities in Texas leadership is overt and highly visible to all residents (25). They noted that this may be a characteristic of rural and more isolated communities. Reddy and Kaufman made a similar point from their three-community study in Mississippi (8). They found that the more active a leader in development programs, the more easily he was recognized by fellow community members. Likewise, the larger and more active the top leadership group in a community, the more likely the group was to be recognized. In a New York study, influence was associated with the degree of interpersonal contact among leaders and presumably with the public at large (19).

Self-Interest and Public-Interest Conflict Is Complex

The role of the economic and political sectors in public policy is extremely complex. Analysis involves determining whether a person actually represents the economic or political sector and therefore presumably acts on grounds of self-interest (enlightened or not). An alternative explanation is that the person acts

within a single sector but also considers a broader public in his decisions. This could be called a presumption of limited or even nonexistent self-interest, a role that all elected officials are expected to play. Some persons hold that accountability, via the ballot box, is essential for true representation. It is, of course, possible that the elected official will not act in the best interests of his entire constituency. But since there are bounds of accountability which he must eventually face, this possibility is supposed to be minimized.

A second element of complexity is that public policy is formulated at many points within a broad arena. Policy implementation involves elements of control. Thus, policies which underlie federal tax laws are made largely by Congress and the IRS. Policies that determine usage of state-owned lands may be made by a state legislature or by a branch of the state executive. The local government units—townships, villages, cities, counties—are the most directly accountable to the public and many seem to feel these units have the least to say about policy. In addition, the new regional governments also have an obligation to constituencies, some of which are outside the structure of formal government (1).

Reviewing secondary material, Fujimoto and Zone argued that policy-making is occurring farther and farther from the local area, by persons who do not value the local area and who are not valued by the local community (2). Outsiders' interests in the community may be dictated by how best to take advantage of policies concerning investment, land use, taxes, and corporate ownership, rather than by considerations of what may be good for the local area. Fujimoto and Zone stressed that representatives of corporate institutions, regardless of social pronouncements, have a primary interest in assuring returns on their investment.

The study of an upstate rural county in New York suggests the need for developing a more complex thesis (19). Since corporate growth has increased and many formerly locally owned enterprises, often family owned, are now part of national and international conglomerates, and since the role of self versus limited interest is a necessary theoretical concern, a study of the role of economic dominants was included in the broader study of the leadership system. Economic dominants were defined as persons who have extraordinary control of economic resources. They play an active part as officers or directors of three or more private firms. In the upstate rural county, 22 such persons were identified. However, when two independent techniques—the reputational technique and a decisional technique—were used to identify public leaders, it was found that only six of the economic dominants were classified as public leaders. In this same study, a majority of the leaders are associated with the business and industrial sector even though they did not qualify as "economic dominants." Yet, when the perspective of these leaders was considered, they had interests which extended far beyond the particular interests of their firms. When asked to list the most pressing problems facing the communities, they gave answers that extended to conditions that affect the entire community. Though the data is not entirely clear, Reddy and Kaufman's Mississippi studies (7,8,9) and Figel and Oberle's Texas data (21) seem to support this thesis.

The complexity of the role of economic self-interest is not denied. However,

these studies show that leadership is motivated by many forces. What Fujimoto and Zone alluded to is a seeming increase in the dominance over local policy by representatives tied to outside groups, which enjoy concentrated resources and have a disproportionate impact on the local area (2).

Rural Residents Receive Fewer and Less Adequate Services, but They Still Prefer Rural Life

Concern for rural Americans has been stated largely in terms of their problems in obtaining adequate community services. W-114 research supports this concern. Utah researchers reported rural respondents listed absence of adequate medical and health facilities as the most serious problem faced by their communities (26, 27). Miller found that rural respondents' evaluation of health-care services and their willingness to pay higher taxes to improve certain health services consistently supported his evaluation of health services as inadequate, by adjusted Public Health Service standards (28). Nearly a third of the people in two rural Utah counties indicated a need for medical services which were not received. In two other counties, deficiencies were seen by 20 and by 23 percent of the residents (27). Carruthers, et al. reported that rural, southern New Mexico residents went less often to some health care services, traveled farther, and rated access to services lower than urban residents (17). Fujimoto and Zone, in a study of land, power, and institutional arrangements in California, showed that even communities of intermediate differentiation have few local services with some communities facing a bleak existence of poverty (3). Radtke's research on allocation of health-producing resources in the Pacific Northwest quantified an apparent maldistribution of doctors in the region, the addition to the value of total physician services with the addition of one more physician ranged from \$31,527 in Washington to \$75,092 in more rural Idaho (20). Rural New Mexicans suggested a high priority for attracting medical specialists to their communities and for providing mobile clinics and emergency vehicles (17). They approved of federal subsidies to reduce health insurance costs and of hospital care financed through social security contributions.

There is evidence, however, that rural residents are willing to accept fewer services in a trade-off for the good life in the country or are willing to commit their own resources to bring their services up to standard. Depending upon the county, 74 to 80 percent of Utah's rural residents indicated satisfaction with living in their community, only 42 percent of the urban sample expressed this sentiment (26). Although admitting their counties had inadequate services, Utah rural residents indicated that access to outdoors and open spaces and friendliness of people are offsetting advantages of rural life. Albrecht found that some rural residents chose financial loss rather than migrate to urban areas. Similarly, Williams concluded that services available in rural communities in Montana are inadequate, by urban standards (12). However, residents believed that services were excellent, considering the sizes of the population and the geographic area

served. No rural residents indicated a willingness to migrate to urban areas, where presumably they could receive higher quality services.

Radtke suggested that technological advances in medicine may be, in part, offset by the negative effects of urbanization, air pollution, lack of exercise, and tensions of urban life (20). Omitting accident rates, the health status of farmers, loggers, and fruit processing workers tended to be higher than that of persons in more sedentary lines of work. Hence, Radtke emphasized the rural residents may not need as much medical attention as urban residents demand. Radtke also suggested that these findings may be peculiar to the Northwest; other studies are needed to find the specific conditions in which people in rural areas appear to have better health.

Rural residents recognized the inadequacy of service delivery in their areas, were willing to support improvements financially, and appeared willing to pay time and distance costs for the sake of living in a rural environment.

Availability of Health-Care Services Affects Use

Complexity of Services in Cities Attracts Users

Carruthers et al., in New Mexico, observed differences between rural and urban residents in health care use patterns (17). In general, rural residents sought certain kinds of services less often, traveled farther, expended only slightly less money per year on medical services, perceived travel time and distance as greater difficulties, and rated their access to services lower than urban residents.

Service Availability Affects Perception of Need

From a study in Utah, Miller concluded that the perception of need of medical services varied according to the availability of that service (28). People with services more readily available felt they must visit a physician at an earlier stage of illness than did persons who had to travel considerable distances to reach the doctor.

This conclusion is amplified by Albrecht and Miller (27). They found that over half of the people in the two predominantly rural counties would have gone to the doctor more often if one had been readily available. Underlining the deficiency, rural households in southern New Mexico indicated less accessibility to medical services than did urban residents (17).

Specialized Health-Care Services Serve Larger Regions

In the New Mexico health-care study, differing service areas for each type of health care service were noted (17). The service areas of the more specialized

types of services, such as hospitals and specialists, were much larger than those of general practitioners and chiropractors. Many of the service areas crossed state lines. For example, there was a heavy flow of southern New Mexico residents to El Paso for health care services, especially to specialists, dentists, and optometrists.

Rural People Want Innovative Health-Care Practices

Rural Residents Rate the Need for Innovative Health-Care Services Highly

Carruthers, et al. noted that rural households in New Mexico rated family need for mobile clinics, staffed by either medical doctors, registered nurses, or paramedics, fairly high in a list of desired services (17). The family need for a mobile diagnostic service was rated second in 20 suggested services and programs. When asked to rate their community needs, rural residents ranked highest a program providing medical service for lower income persons. Also high on the list of community needs were programs of free dental service for lower income persons and drug and alcoholic treatment programs.

Similarly, Albrecht and Miller found that respondents were much more receptive to patronizing paramedics in rural counties than in urban counties (27). In all three rural areas, over 80-percent of the respondents were willing to go to paramedics.

Rural Residents Endorse New Methods of Paying for Health-Care Services

In New Mexico, Carruthers, et al. found the majority (65%) of their respondents favored a federally subsidized health-insurance program available to all population segments (17). Almost three-fourths of the rural sample approved of a program to finance hospital care by increases in social security tax. When asked to choose the most desirable health program, none of the respondents indicated that present programs were adequate. Forty-seven percent of the rural sample favored federally subsidized health insurance, 37 percent chose a program of hospital care financed by increases in social security tax and 12 percent favored a comprehensive program of medical and dental care financed from taxes.

Albrecht and Miller observed that people in rural Utah areas seemed much more willing to pay increased taxes to improve health and medical services than urban residents (27). Also, health care received priority over other kinds of public services in two primarily rural counties.

Mechanisms for Use of Research Results Should Be Developed

Williams and Lassey pointed out that new research findings are often not

applied to regional development programs (14). They concluded that mechanisms must be developed to increase linkages between the researcher and policy makers, so that research programs address the most important policy questions and in a form that is relevant to the decision-making process. Other studies support this conclusion. For example, in assessing the effectiveness of a seven-county federation in south-central Montana, Hanton, Lassey, and Williams emphasized that federation leaders had close and frequent communication with the researchers (10). As a result, federation leaders were able to address operational questions which the research results indicated had become obstacles to the effectiveness of the organization.

CLARIFICATION OF FURTHER RESEARCH NEEDS

Many of the research reports and working papers also indicated particular researchable questions which arose during the conduct of the research. Some specific research areas are identified which deserve closer exploration.

Constructing and Testing Social Indicators

Tjersland argued that researchers have not developed adequate quantitative measures of noneconomic objective goals (5). He stated that the available noneconomic indicators are *ad hoc* comparisons of a few simple and quite obvious items and give little consideration to selection and weighting. A number of W-114 researchers have noted frustrations resulting from less-than-adequate measurement of socio-economic phenomena. Dillman outlined the problem situation: there are at least two judgements of adequacy, from the viewpoint of the consumers and the providers. Three elements of adequacy are existence, efficiency, and effectiveness, with the first two being much more easily quantified and traced through time than the latter (29). Carruthers and Urquhart perceived a similar conceptual problem in their discussion of health service evaluations from the point of emanation and from the point of utilization (15). The resultant social indicators might be significantly different. In a related paper, Williams described a conceptual model for use in assessing service adequacy (12). A number of measurement problems were also highlighted, and the author concluded that these methodological problems must be addressed for development of reliable service-adequacy indicators.

Carruthers, et al. used both the diversity index and Guttman scale to characterize the diversity and mix of services utilized by households and available to these households by community (16). Neither technique scales adequacy of health care in terms of mix or quality of the services.

Radtke developed indices of health status of communities and implied that inadequacy of data conditions the findings (20). A more complete representation of health status is necessary to evaluate the relationship between provision (and/or

effectiveness) of health care services and all social, economic, and environmental factors.

Researchers of community service delivery have been much more effective in specifying independent variables of analysis than dependent variables. The dependent variables (service outcomes, changes in social welfare, etc.) continue to elude even the most creative. Effectiveness of community-services research in terms of both validity and policy formulation potential will be greatly enhanced through development of more descriptive social indicators.

Perspectives on Adequacy of Community Services

As mentioned, community-service adequacy can be analyzed from two perspectives, the point of utilization and the point of emanation. The latter approach focuses on the institutional structure involved in service delivery and concentrates on an area served by an institution. In contrast, the point-of-utilization framework looks at the consumer of the service. This approach emphasizes need.

Problems inherent in each approach deserve investigation. With the point-of-emanation approach, one encounters the small sample size of service centers in most rural areas and the probability that consumers within a particular center likely go to several places for that service. The point-of-utilization approach also involves a problem of sample size, it is difficult and costly to obtain many respondents in many communities. Thus, generalizations about the consumer's needs are not ensured.

There are obvious advantages and disadvantages of either approach. For instance, when considering only the recipient of a service, institutions providing that service are essentially ignored. Thus, recommendations about how to improve service delivery cannot be made. However, concentrating on institutional structures providing services without considering the consumer results in ignorance of needs of intended recipients. Research might explore ways to combine the two approaches to present a unified view of service delivery systems. After adequacy is measured by both approaches, an attempt to correlate outcomes should be made.

7

Study of Effectiveness of Alternative Organizational Structures

One excellent paper on organizational structure reviewed five distinct models of multicounty organizational structure (1). These varied from special-purpose districts to multipurpose and fully representative districts that have authority for planning and implementing programs. Some research within the scope of the present project has data on some of these models (e.g., Montana, California - Davis, Texas, Mississippi, and New Mexico) but more comparative analyses are needed. Particularly, variations in linkages that different structures of organizations

have with other local agencies need specification. Also, examination of linkages that exist between these regional structures and other regional, state, and federal systems is needed. Some of the linkages that need to be specified are the types of leader characteristics, variations in purposes of the organizations including publics they are supposed to serve, and particularly the forms of authority each organization has vis-a-vis other organizations.

The issue of representativeness deserves exploration. How are decision-makers chosen in an organization? What are their characteristics? Can they be classified as to an orientation to the development of a region? Researchers in Montana and Mississippi have some data on this. Generalizations made from these studies ought to be reaffirmed in other settings. The Mississippi study also suggests a variation, viz., what organization styles does the development organization use to achieve its objectives? In other words, what specific forms of structure are used -- committee systems, subsidiary organization, loose member representation, or other?

The documentation of the strategies of program development is also required for the variety of purposes for which observed organizations have been formed. Are the objectives (the goals) of development clearly demarcated? To whom did the organization turn for help? To the public by a referendum or a massive campaign or to experts in a state or federal agency? How open is the organization? What is the value of research (data gathering) and planning in the organization's approach to achieving its goals? Some data seem to indicate that essentially no research and planning are used in some development areas. For example, numerous health systems have been developed over the years in southern New Mexico with apparently no formal consideration of organization. But they are organized in the sense that there are numerous patterns of service delivery on which people must depend for services and, presumably, any new delivery of services must consider that which already exists. In Colorado, health districts (regions) have been planned. Colorado patterns might be compared with those in an area without planning. Such a comparison should allow a conclusion to be reached as to quality of service delivery under different systems, and in particular would indicate an answer to the question of whether having an organization -- even minimal -- is effective.

Comparative Analyses of Service Delivery Systems and Leadership Structures.

Generalizations emerging from the studies indicate there is a need for comparative and precise information on a number of variables. For example, California, Mississippi, Montana, New Mexico, New York, and Texas have data on the community setting within which certain actions take place. Thus far, the data indicate that rural settings are substantially different from urban settings, rural areas having more homogeneity, more visibility of leaders, and that these differences affect quality of service delivery. The variations in form of community differentiation ought to be clearly specified.

Similarly, delivery of specific services, such as health care services, occurs in community settings which ought to be compared more precisely.

There is also more or less similar data on power relationships within certain settings. More specific comparability of these data is highly desirable. Especially important is the nature of linkages within these power settings, linkages between settings and locality within which they function, and forms of linkages with agencies external to the community. The hypotheses developed in the California and New York papers need to be specified and the data from Mississippi, Montana, New York, and Texas compared.

More detailed analysis of the nature of decision-making and issue resolution for these rural settings is also desirable. How are public problems defined? How do amorphous leadership systems begin to function to accomplish, or even define, their objectives?

The Composite of Community Services Appropriate for Rural Areas

Concern with rural area development seems to follow from two premises:

- 1) rural people should have the same access to the good life as urban dwellers; and
- 2) urban problems are related to rural problems. The former implies rural residents would have access to the complete range of community services normally available in larger urban centers. W-114 research, however, has been fairly restricted to investigation of three items: planning of development organizations, health care delivery, and community structures. Partial analysis has always tended to precede more complete analysis of a system. Although these results may be useful to selected elements of the community, decision-makers faced with allocating revenue-sharing money need a complete picture of the optimal mix of all community services, with some specification of investment priorities needed to most quickly reach this optimum. Research by Patterson and Williams outlined community service needs associated with population influx in six counties in North Dakota, Wyoming, and Montana (11). Working with economists from the Bureau of Reclamation, the researchers examined the impact of coal-related population increase on community service needs in the six study counties and available revenues to support such services. This was one attempt to develop a complete picture of the optimal mix of community services in six study counties.

Albrecht and Miller, in their study of three rural Utah counties and the more urbanized Salt Lake County, asked respondents to assess current services and to indicate services they preferred to upgrade through expenditure of additional tax revenue (27). This was the only study to evaluate the package of services desired by consumers.

A composite of services is difficult to analyze because of the extreme variance in size of market areas. However, such an analysis would be a particularly useful research activity, because services are competitive for local, state, and federal tax revenue and current allocations to each may reflect politics more than consumer demand.

APPENDIX— Abstracts of Research

California (Berkeley)

1. McEntire, Davis, (University of California at Berkeley), "Alternative Models of Regional Organization," paper presented to the annual meeting, Rural Sociological Society, Baton Rouge, Louisiana, August 1972.

Objectives and Hypotheses. The objectives were to 1) examine leading alternative models of regional organization, considering their underlying rationales, field of application, extent of departure from the status quo and associated values and expectations, and 2) evaluate an alternative form of regional organization under consideration in California.

Procedures. A review of literature was made with critical comments. No hypotheses were tested.

Outcomes and Conclusions. The author asserted that regionalism results from indictments of local government structures: 1) local governments are too small to cope effectively with modern problems because they lack financial and technical resources, and 2) jurisdictional boundaries are irrelevant for problems and social needs determined by geography. Regionalism has gained some boost from the federal government in that a number of federal programs have been designed to promote regional planning and development. Several such federal acts were noted in the paper. The federal government has favored two kinds of regional organization: a voluntary association of local governments, perhaps with a few state and federal representatives, and a regional organization based on citizenry representation of important regional groups and interest. Regionalists have not fully considered the question of regional government as such and how it would relate to the current tier system of federal, state, and local government.

The remainder of the paper is an excellent review of five major types of regional organization: special districts, associations (councils of government), regional planning commissions, development organizations, and regional control agencies.

California (Davis)

2. Fujimoto, Isao, and Martin Zone, "Land, Power, and Inequities in Rural America. Research Implications," working paper, Department of Applied Behavioral Science, University of California, Davis, California.

Objectives and Hypotheses. The objectives were to 1) identify basic factors affecting development of rural areas; 2) identify social consequences of rural policies and of structural changes in agriculture, and 3) suggest areas of research which would relate some of these factors to quality of rural community services.

Procedures. A wide variety of data sources were reviewed - congressional hearings, critiques by rural sociologists, reports by public interest groups, National Academy of Science Review of land grant research, and comments by journalists.

Outcomes and Conclusions. Drawing on various sources of data and analyses, the authors reviewed some factors for consideration in determining causal factors related to quality of rural community services. They contended that a study of rural services would merely measure surface manifestations of more deeply ingrained problems in society. Their discussion directs attention to the following topics that can be considered as worthy of further investigation. 1) decreasing concentrated ownership of land and resources, 2) tax structures working to the disadvantage of rural residents, 3) purported benefits of development in rural areas, 4) the real beneficiaries of agricultural subsidies, and 5) the myth of impartiality and the problems this can create.

3. Fujimoto, Isao, and Martin Zone, "Land, Power, and Institutional Arrangements for Rural Community Services," working paper, Department of Applied Behavioral Sciences, University of California, Davis, California.

Objectives and Hypotheses. The research was conducted to identify select communities for further investigation of. 1) provision and utilization of service, 2) organizational configurations, and 3) social indicators. In part, the study examined to what extent Walter Goldschmidt's earlier findings on farm size and quality of rural life still holds in California's Central Valley. Subsequent research will test the hypothesis concerning structural factors, such as patterns of land-holding and quality of rural community services.

Procedures. Thirty-nine communities in Fresno County were surveyed. Extensive data were obtained from the 1972 *Commercial Atlas and Marketing Guide* (New York: Rand McNally), the yellow pages of the Fresno County telephone directory, and field site visits. The data included measures of demographic, economic, political, locational, and community services variables.

A Guttman scale of community differentiation was designed. It used 31 variables for the 39 communities. The coefficient of reproducibility was .943 and the coefficient of scalability was .695.

Outcomes and Conclusions. Eight of the 39 communities were classified as having high differentiation. The remaining 31 communities were discussed under a heading "medium differentiation", though the authors implied that a number of communities have few local services, a very simple form of government, low population, and very high dependence upon large communities in the area.

Communities in the Westlands Water District have a bleak existence of poverty. Two of them are experimenting with a mobile health delivery system. In general, the larger, more differentiated towns are incorporated.

Towns on the east side of the valley tend to be smaller grower towns. Towns on the west side, located around the Westlands Water District, usually are characterized by large scale land holdings.

Four towns were finally selected as most promising locations for further research: Parlier, Firebaugh, Orange Cove, and Mendota. Other towns were rejected because of size and location in the Fresno Metropolitan Area.

Colorado

4. Saywell, Robert M., Jr., "Optimal Size, Number and Location of Hospitals in Rural Colorado to 1980 - An Economic Model and Case Study," Ph.D. dissertation submitted to the Department of Economics, Colorado State University, May 1972.

Objectives and Hypotheses. The general purpose of the study was to show that current social and economic trends of population in Colorado and increasing costs of medical care have erected barriers to rural-resident accessibility to hospital services.

The specific objectives were to: 1) establish hospital location patterns for rural Colorado with economically-determined optimal number and size of hospitals, 2) relate these patterns to demographic expectations in 1980, 3) estimate hospital costs of several best solutions to problems of hospital location patterns; and 4) develop hospital facility policy recommendations.

Study Area. Colorado's 24 regional health-planning areas were used as a framework for this study. These areas were classified as base, with a teaching hospital; intermediate, with a large hospital; and rural. There is one base region, six intermediate, and 17 rural. Each region was described by its member counties, its location, its transportation system, major economic activities, major cities, and terrain. The 17 rural and 2 of the intermediate districts were later combined to give 8 hospital districts for the state. These combinations were derived on the basis of two geographic factors: absence of adequate continuous land transportation between regions and reasonably short (90 minutes) commuting times between towns in connecting regions.

Procedures. Demographic trends to 1980 were taken from Colorado projections. The supply of hospital services available in 1970 was projected. Models were designed to analyze total patient access cost model (optimum numbers and location). Data from hospital regions were utilized in the models to obtain optimal solutions. A simple linear regression analysis was used to extrapolate past trends to predict future hospital-usage.

Outcomes and Conclusions. Patient transportation costs, when added to hospital production costs, were a significant part of the costs borne by society

when gaining access to medical care in hospital facilities. The author concluded that rural outmigration will affect the total costs borne by society. Rural dependence results in reduced population density, which implies greater spatial disparity and greater transportation costs involved in maintaining optimally operated hospitals in rural areas.

Using the optimum-size model, Colorado hospitals should maintain a scale between 150 to 500 beds to minimize average inpatient production costs. A spatial-density model disclosed that even low density areas (one person per square mile) should maintain that minimum.

One ideal location for a single hospital facility was selected for each derived hospital region. The total patient access cost was calculated for this facility. The added cost of an additional facility (the marginal access costs) was also given. Both minimum-access costs (one hospital facility at an optimal location) and an alternate solution (two hospital facilities each at optimum locations) were calculated.

All the above solutions were based on purely economic criteria. Variables other than economic were also listed. They included political and social variables but were not combined into the economic analyses.

5. Tjersland, T., "Social Indicators. Measure for Establishing Goals and Priorities of Social Needs," working paper, Department of Economics, Colorado State University, Fort Collins, Colorado, October 1972.

Objectives and Hypotheses. The main objective was to discuss a model of social indicators. The author reviewed literature on social indicators, discussed problems with construction of indices, chose a method of solution, and discussed a factor analysis model.

Outcomes and Conclusions. The paper is an excellent discussion of the basis for national social accounting and shows a clear methodology for its use.

Mississippi

6. Reddy, S.K., (Mississippi State University), "Programs for Rural Development: A Comparative Study of Three Mississippi Multi-County Centers," paper presented at the Association of Southern Agricultural Workers meeting, Atlanta, Georgia, February 1972.

Objectives and Hypotheses. The objective was to identify problems faced by three rural communities in Mississippi, and to identify and analyze the nature of development programs. No formal hypotheses were stated.

Study Area The three communities are in Northern Mississippi (Oakville), Southern Mississippi (Dayton) and the Mississippi Delta (Farmington).

Procedures Community programs, major community problems, and organizations were enumerated. Key informants and knowledgeable were interviewed, local newspapers were scanned for community actions, and three to four dominant actors in a limited number of community actions were interviewed. Additional participants in community actions were found for a total set of 250 leaders, each of whom was interviewed.

Programs (community action) were sought for particular interest areas: public facilities and services, agriculture and natural resources, industry, trade, and services; education, health, welfare, housing and urban renewal, recreation and the arts; religious; and fraternal, ethnic, and patriotic.

7 Reddy, S K , and Harold F. Kaufman, (Mississippi State University), "A Community Approach to Rural Development," paper presented at the Rural Sociological Society meeting, Baton Rouge, Louisiana, August 1972.

Objectives and Hypotheses. The purpose of the paper was to articulate basic concerns in the community approach and illustrate problems involved by presenting limited and preliminary findings of a given study.

Study Area Dominant units within each of three multi-county centers in Mississippi composed the study area. Center populations were from 20,000 to 25,000 persons.

Procedures: See Abstract 6.

Outcomes and Conclusions. Each of the three communities had programs in each of the interest areas. One community had a greater volume of activity — Oakville. That community also had a longer history of concern with development.

Two of the three communities had populations 50 percent or more black. The struggle for leadership had been keen and it had concentrated on the schools. Both these communities had fewer community programs. The other community was 20 percent black, with a better organized and better supported black population.

Finally, the community with the greater volume of community programs had the most successful coordination also. This was partly because of its longer history and partly because the black segment of the community seemed more integrated into the community.

8 Reddy, S.K , and Harold F. Kaufman (Mississippi State University), "Community Structure and Development of Services in Three Mississippi Com-

munities," working paper presented to the Project W-114 Committee, January 1974.

Objectives and Hypotheses. The objective was to analyze characteristics of organizational and leadership structure which promote development of services

Study Area. See Abstracts 6 and 7.

Procedures: See Abstract 6.

Outcomes and Conclusions. An organizational and leadership structure promotes development when. 1) high "generalization of structure," occurs i.e., when associations sponsor more programs, when programs cover a large number of interest areas, and when leaders are involved in a larger number of interest areas; 2) the volunteer participant, the leader, and the agency specialist have effective relationships, 3) participation and cooperation between voluntary associations and government agencies are balanced, 4) the program is representative of ethnic, class, and rural-urban composition, 5) individuals participate in a larger number of programs and organizations, 6) leadership is continuous over time and new leadership is continually recruited, 7) there is a high degree of identification of leaders; and 8) leaders are easily recognized by fellow community members. Also, the larger and more active the top leaders in a group, the more they are recognized by both leaders and other community members.

9. Reddy, S.K., and Harold F. Kaufman (Mississippi State University), "Recognition of Leadership Community in Two Communities," paper presented at the Southern Association of Agricultural Scientists Meeting, Memphis, Tennessee, February 1974.

Objectives and Hypotheses. The objective of this paper was to relate recognition of community leadership to its continuity through time. Differences were analyzed in the extent of recognition between 1) leaders active in their respective communities in both 1964 and 1972, and 2) those reported as active only in 1972. These two groups of leaders were compared in terms of their scope and intensity of community participation.

Procedures. The data were gathered in Dayton and Oakville, Mississippi, during the summers of 1964 and 1972. Data collection instruments, procedure, and methodology were similar at both times, although more emphasis was placed on positions in organizations in 1964.

The method of delineating leaders employed in the investigation was a combination of positions in organizations and participation in actions or programs

Outcomes and Conclusions. Community A (Dayton) differed very little between 1964 and 1972 in the extent of recognition of leaders. Community B (Oakville) showed appreciable difference between the two survey years. Leaders were much more widely recognized in 1972 than in 1964.

Key observations were 1) recognition of leadership was highly related to continuity; 2) continuity was considerably greater and the relationships between continuity and recognition stronger in community B than community A, and 3) continuity of leadership in both communities, especially B, was decidedly correlated with scope and intensity of involvement in community life.

Montana

10 Hanton, Sharon, William R. Lassey, and Anne S. Williams, *Organizing for Area Development A Case Study*, Research Report No. 27, Agricultural Experiment Station, Montana State University, Bozeman, Montana, August 1972.

Objectives and hypotheses. The main objective was to examine the structure, functioning, and effectiveness of multi-county organization.

Study Area Eight counties participating in the Southcentral Montana Development Federation.

Procedures. Local leaders, such as county development council presidents, committee chairmen, and others involved with the federation, were interviewed. Secondary data describing the federation's activities were also utilized.

Outcomes and Conclusions. The federation has been responsible for several development projects, frequently working with other organizations. The authors judged the federation to be fairly effective as a beginning multi-county organization. Much of the effectiveness of the federation was attributed to a strong chairman and vigorous county extension personnel.

Coordination was needed between the federation's activities and other agencies and institutions in the area. Formal ties between counties and the federation were weak. Methods of communicating the organization's activities to the citizens were not formalized.

11. Patterson, Donald, and Anne S. Williams, "Social and Municipal Service Needs in Six Counties Where Major Coal Development is Anticipated," progress report, Center for Interdisciplinary Studies, Montana State University, Bozeman, Montana, 1973.

Objectives and Hypotheses. The objectives of this research effort were to identify existing municipal and social services in six study counties, assess the service delivery systems in these counties, and make projections concerning the impact of soil-related population growth on community service needs and existing service delivery systems.

Study Area The study area consisted of six counties in the three-state area of Montana (Rosebud and Big Horn counties), Wyoming (Campbell and Sheridan counties), and North Dakota (Mercer and Oliver counties). Available projections concerning the probable development of coal strip mining and/or mine mouth coal generation plants in the region indicated that these six counties were most likely to experience rapid coal-related population influx.

Procedures. Interviews were conducted with service providers in each of six counties, using prestructured, pretested questionnaires. Among services surveyed were educational services, municipal services (such as fire and police protection, public water supply, public sewage disposal), city/county planning, public welfare services, legal services, recreation services, transportation services, and health care services. Heads of agencies providing these services were interviewed to obtain a description of services provided, geographical area served, existing service needs and anticipated service needs which might accompany three projected levels of population increase. Data were also gathered to assess organization of service delivery systems, including linkages at local, state, regional, and national levels.

Outcomes and Conclusions. None of the services in any of the study counties to be directly affected by construction of coal gasification plants was capable of handling anticipated quantity of projected population growth without serious adjustments. Further, none of the counties surveyed was very far along, either with the process of planning for expansion of service delivery systems or with associated county-wide land use planning. Although funding limitations and unavailability of planning professionals within county government had hampered progress in these tasks, awareness of the need for planning on the part of citizens had also grown slowly.

In addition to greater coordination between the counties and the states being affected by coal development, all counties surveyed could improve coordination between service delivery agencies by bringing more of the related agencies together in the same service delivery center.

General recommendations can be summarized thusly 1) counties and cities should collaborate in creation of county-wide comprehensive planning organizations. 2) counties and cities should collaborate in the employment of qualified full-time personnel to both prepare and implement plans. 3) state and federal government ought to provide assistance needed to create, staff, and fund these planning implementation organizations. 4) future service needs and priorities should be projected finally by local citizens and officials after detailed local

planning study and discussion, 5) counties must consider expanding their county courthouses to become governmental service complexes, housing a broad range of service programs, together with county administrative and policy-making facilities and offices of city government in the county seat, 6) efforts should be made to strengthen growing communities by including new residents in the fabric of community relationships, by integrating them as participating members of the community, so that they become not just service users but also feel themselves to be part of the community which makes the services possible, 7) health-related services need to be unified and integrated into a health care delivery complex facilitating access and coordination of these services, and 8) provisions for adequate services to outlying mobile home communities of short term construction workers are desirable.

12 Williams, Anne S., "A Community Service Inventory and Assessment of Adequacy of Community Service in Six Montana Counties," working paper, Center for Interdisciplinary Studies, Montana State University, Bozeman, Montana, 1973.

Objectives and Hypotheses. The objectives of this research effort were to, 1) describe existing government and health care services in six selected counties of eastern Montana, 2) identify economic, demographic, geographic, and social characteristics which affect provision and delivery of government and health care services to six eastern Montana counties, 3) examine existing alternative institutional structures for providing government and health care to the six study counties in eastern Montana, and 4) identify policies, alternative patterns of organization, and conditions which are requisite to effective planning and coordination for delivery of government and health care services to sparsely populated communities and/or counties.

Procedures. In the spring of 1972, a pilot study of three Montana communities in Richland County was initiated. These communities were Sidney, Savage, and Fairview. During the pilot study interview schedules were developed for use in assessment of quality and extent of government and health care services in the five other study counties of eastern Montana. Field work during the summer of 1972 was devoted to gathering data descriptive of existing government and health care services in the six counties of eastern Montana. Data previously gathered during the pilot study were added to data generated from this larger study. Interviews were conducted with service delivery providers to assess type, quality, and extent of health and government services available in the study counties. Additionally, services were inventoried using the yellow pages of the telephone directory, and a Guttman scale was developed to differentiate the number and variety of services among counties.

Outcomes and Conclusions. The quality of rural community services in the six study counties was judged to be inadequate compared to services available in urban centers of the state. However, rural residents generally did not regard their services as inadequate. In fact, most rural residents felt services were quite adequate for the community size. The author recommended that more efficient and effective service delivery could be achieved by service integration and organization of well-planned service delivery systems.

13. Williams, Anne S., C. Jack Gilchrist, William R. Lassey, (Montana State University), "Leader Attitudinal Orientation in a Multi-County Area," paper presented to the annual meetings of the Rural Sociological Society, Baton Rouge, Louisiana, August 1972.

Objectives and Hypotheses. The objectives of this research report were to examine leadership structure in a seven-county area, to categorize leaders by attitudinal orientations, and to investigate how local or area development is influenced by leader attitudes.

The authors hypothesized that local leaders' attitudes would influence effectiveness of multi-county development programs. Also, size and number of competing sub-groups of leaders would affect power of leader sub-groups.

Study Area. The study site was a seven-county development federation in south-central Montana. The purpose of the federation was to increase economic and social stability of the area. The county representatives focused on organizing development programs for rural areas and small towns, although 70 percent of the population of the seven-county area lived in an urban setting.

Procedures. Leaders were identified using a four-step process. 1) key informants ranked local leaders by degree and type of influence, 2) leaders identified in this manner selected other leaders and ranked them by degree and type of influence, 3) individuals who were identified as having large influence on issues affecting the county were selected, and 4) current office-holders were chosen. The 102 leaders identified using these criteria were interviewed. The most active participants in the federation were again interviewed, using open-ended questions. Identification of leader types and subgroups was accomplished using an analytical procedure developed by Gilchrist.

Outcomes and Conclusions. Attitudes of area leaders were classified into three major types. 1) "satisfied traditional," leaders satisfied with current leadership activities, 2) "anti-government pessimists," leaders pessimistic about either federal or local government capabilities to meet needs of area residents, and 3) "development-oriented activists," leaders who placed emphasis on progressive development programs. Thus, the study area was characterized by a pluralistic leadership structure.

The most powerful leader types were the "satisfied traditionals" and "development activists." "Satisfied traditional" orientations were dominant in the total leadership structure. The key leaders in the federation were classified as "development activists."

Because of underrepresentation of the urban area in federation membership, effectiveness of the multi-county program was questionable. The authors concluded that the federation would need a much more representative organization before it could operate effectively.

14 Williams, Anne S., and William R. Lassey, *Regional Planning and Development Organization and Strategies*, Center for Interdisciplinary Studies, Agricultural Experiment Station, Montana State University, Bozeman, Montana, August 1973.

Objectives and Hypotheses. The general objectives of the report were to describe factors relevant for delineation of regional boundaries, examine various federal, state, and local programs which have a regional basis, identify key components of an effectively functioning regional organization, and explore benefits and costs of regional development and planning organizations.

Procedures. Structure and function of existing regional organizations were reviewed. The authors developed a model of regional planning which specifies components of an effective area planning and development program.

Outcomes and Conclusions. Geographic and ecological factors, social organization, economic areas, and political organizations are relevant factors for delineation of regional boundaries.

The report contains a detailed description of regional programs such as economic development areas and councils of government. A regional planning and development organization model was presented. The model contains key components of processes, participants, outputs, and evaluations. Techniques and methods to achieve an effective regional organization were discussed.

A multi-county area organization must be representative of participating local areas. Also, regional organizations must work with existing local, state, and federal agencies and programs.

New Mexico

15. Carruthers, Garrey, E., and N. Scott Urquhart (New Mexico State University), "Some Methodological Considerations for Rural Community Services Research," Proceedings on the National Workshop on Problems of Research on Delivery of Community Services in Rural Areas, Lincoln, Nebraska, Dec. 13-16, 1971.

Objectives and Hypotheses. The objectives were to plan the research design, specify major classes of independent variables hypothesized to influence adequacy of community service, and present a conceptual framework for study of community services.

Procedures. A flow chart of types of information needed to arrive at recommendations for organization and/or institutional change in improving adequacy of service is presented. The paper is primarily a theoretical exploration of alternative conceptual frameworks for studying community services.

Outcomes and Conclusions. The flow chart indicates what kinds of information are needed on organizational and community characteristics to analyze adequacy of community services. Then policy evaluations about which variables should be manipulated to improve services can be made.

The point of utilization approach was concluded to be a better conceptual framework for the study of community services in southern New Mexico than the point of emanation approach. The point of utilization approach focuses on community service from the consumer standpoint. This approach emphasizes need. The framework of point of emanation looks at institutions involved in service delivery and concentrates on a service area served by an institution. Several problems arise with the point of emanation approach: 1) sample size of service centers in southern New Mexico is small, 2) focus on the institution responsible for a service rather than on people needing the service is inadequate to find out how to change the service consumers' situation, 3) methodological problems arise in attempting to relate community characteristics with overlapping service areas, and 4) consumers of a particular service all likely go to several places for that service.

The deficit of need of a particular service is defined as the aggregate need minus the actual utilization, at the same origin. To evaluate need deficits, the center of need must be defined, the need delineated and the utilization evaluated.

16. Carruthers, Garrey E., N. Scott Urquhart, Clyde Eastman, and Kathryn Renner, "Analysis of the Availability and Utilization of Health Care Services," working paper, Department of Agricultural Economics and Agricultural Business, New Mexico State University, 1974.

Objectives and Hypotheses. The objectives were to identify the relationships between socio-economic, cultural, and demographic variables and institutions related to patterns of use of health care services, to define objective measures of adequacy and of access to health services and to determine the existence and adequacy of these community services provided in the study area. Several hypotheses related household characteristics, such as location, income, and education, to health service use.

Study Area: A 12 - county area in southern New Mexico:

Procedures. For information on the primary data gathered by personal interview, see Abstract 17. Secondary data were utilized to describe socio-economic, demographic, institutional, and organizational characteristics of southern New Mexico. Key informant interviews were used to identify inter-organizational relationships. This information was related to existence and adequacy of medical services. Stepwise multiple regression analysis was used to relate household characteristics to household utilization of medical services. Relationships between the availability of services and household use were tested using regression analysis. The Guttman scaling technique was used to scale complexity of medical services for two points in time, 1950 and 1970:

Outcomes and Conclusions. See Abstract 17. Because of the current stage of research, few conclusions have been reached. Most of the contributions are in the area of methodology. Using the Guttman scaling technique, medical services were observed to increase in complexity in an orderly fashion. A diversity index was devised which also measures the increasing complexity of services available in a community. Composite diversity scores for medical service areas have been computed. The need to have composite scores, including the availability of services in towns in which medical services are frequently utilized, strongly indicated the interdependence of communities for health services and the need to study health care regions.

Regression analysis with the dependent variables of household utilization diversity scores and diversity scores of community medical services have not yet been completed.

17. Carruthers, Garrey E., N. Scott Urquhart, Clyde Eastman, and Kathryn Renner, "Health Utilization Patterns in Southern New Mexico," working paper, Department of Agricultural Economics, New Mexico State University, 1974.

Objectives and Hypotheses. The basic objective was to identify basic health care patterns in southern New Mexico by residence.

Several hypotheses differentiated patterns of medical service utilization by type of residence, rural or urban. Cost of services, distance traveled to services, and frequency of visits to medical services were related to household residence. Rural residents were hypothesized to pay a higher percentage of their medical expenditures on services of a general nature, such as general practitioners and chiropractors. Urban households were expected to go more often to the various services and to travel lesser distances.

Procedures. Data were obtained by personal interview of a stratified random sample of 599 households in 12 counties comprising southern New Mexico, 302 rural and 297 urban households were selected at random using a grid-map

technique. The questionnaire contained questions on household characteristics as well as health care use of each family member in 1971. Data on utilization of various medical services were gathered.

Outcomes and Conclusions. The analysis revealed there were some differences between rural and urban residents in health care use patterns, but these differences were much less than hypothesized. In general, rural residents went less often to the various kinds of services, traveled farther, expended only slightly less money per year on medical services, perceived travel time and distance as a much greater difficulty factor, and rated their access to services lower than urban residents.

Respondents perceived the needs of their family and their community as being different. In general, specialists were given high priority assignments for both family and community, by both rural and urban sample segments. The rural residents gave a higher priority rating to the need for mobile clinics than urban persons. Community need for drug and alcoholic treatment and mental health programs was rated relatively high.

Differing service areas for each type of medical service were noted. The service areas of the more specialized types of services, such as hospitals and medical doctors, were much larger than those of general practitioners. Many of the service areas crossed state lines, there was a heavy flow of southern New Mexico residents to El Paso for health care services, especially to dentists, optometrists, and other specialists.

New York

18. Erickson, Eugene C., (Cornell University), "Rural Communities in Decline: Consequences for Leadership and Participation," Ch. 6 in *Communities Left Behind. Alternatives of Development*, The Iowa State University Press, Ames, Iowa, 1974, pp. 67-81.

Objectives and Hypotheses. The objective was to explore what historical changes, such as losses in skilled manpower, migration of people, industrialization, and mechanization, imply for the small, declining community. Emphasis was on structural relationships between decline and educational, economic, leadership, and participation variables. The implication for policy making was also explored.

Study Area. The data, held in the New York State Data Bank, are for the 300 counties in the twelve Northeastern states and the District of Columbia.

Procedures. Much of the information was gathered from historical sources. The statistical data on each of the 300 counties and the District of Columbia included population, income, educational, residential, industrial, and political information.

A general conclusion was that aged and rural populations with lower than

normal education, already low income, and with relatively fewer economic resources, are faced with a further decline relative to other areas.

The communities with constraints imposed by technology had a greater intensity of interaction. Interaction networks tended to center around individuals and families. Thus, historically, leadership was more representative. Decisions concerning resource allocation also had a local emphasis.

Participation also increased in communities with higher levels of education and with a greater number of organizations. The general argument is that levels of participation have decreased in the last 40 to 50 years.

19. Erickson, Eugene C., and Bruce M. John, "The Structure of a Rural Leadership System and the Delineation and Solution of Public Problems," working paper, Department of Rural Sociology, Cornell University, Ithaca, New York, 1973.

Objectives and Hypotheses. The objectives were to determine form (structure) of a leadership system in an essentially rural county in upstate New York, test various methods by which the leadership system could be delineated, determine the nature of its structure (the profile of its members, the forms of their inter-relationships), and specify forms of leader participation in public problems and leader perceptions as to solutions of these problems.

The major hypotheses were. 1) an authority position in business or industry and personality traits consistent with a community norm are the main sources of power, 2) persons named by use of the reputational technique will be actively involved in community decision-making, 3) top power figures have a broad scope of power, 4) there is greater cohesiveness among the top power figures than among the lower level power figures, 5) top power figures see issues relating to business and industry as the most important, and 6) the nature of participation in community projects will vary by degree of power.

Procedures. A set of knowledgeable was used to develop an initial list of public leaders and significant problems of broad public concern which had been resolved within the last 3 years. Personal interviews, combined with a personal data questionnaire, were held with each informant and with each public leader. Knowledgeables were also used to obtain detailed information on the initiation and resolution of 15 public issues.

Outcomes and Conclusions. Tentatively, the public leader profile showed these characteristics were more valued. A business related occupation, income of over \$25,000, Republican politics, male sex, between 44 and 57 years of age, married, Protestant religion, Anglo Saxon, father also very active in community affairs, 30 or more years of residence in the community, birthplace of the respondent and his father within the county, father also a resident of the county for more than 30 years, and a tendency to read metropolitan newspapers (cosmopolitanism).

Economic dominants (defined by an inter-locking directorate criterion) were not necessarily public leaders (6 of 22 only). Being associated with business or industry (whether or not an economic dominant) was a selector of high influence. Obviously, factors other than control of economic resources were influencing choice of public leaders.

The degree of interpersonal contact among public leaders was directly related to degree of influence, i.e., those with high influence have significantly more interaction among themselves and with others than those with less influence.

Three clusters of public leaders were identified by a Guttman Small Space Analysis technique, as well as a sociometric profile: the "city group", the "political and public policy group", and the "county group."

Public leaders identified by the reputational technique (through the knowledgeable) were essentially the same persons predominantly named as persons most influential in 11 specified interest areas.

Personal qualities and personal achievements were the most significant factors in determining an individual's standing in the community. Similarly, personality factors, linkages among organizations and with the extra-community system (as well as knowledge of issues, participation in public affairs and an authority position in the economic sector) were factors that contributed to an individual's influence.

Priority public problems were seen as those, broadly, associated with employment (industrial promotion, business) and those corollary services of education, housing, and health.

The higher the influence rating, the larger the number of public problems in which the individual had participated. Also, the higher the influence rating, the higher the degree of involvement in these public problems. Finally, those with a higher influence rating were more involved in all phases of public problems - planning, supporting, and implementation.

Oregon

20. Radtke, Hans Dietrich, *The Allocation of Health Producing Resources in the Pacific Northwest*, Special Report 406, Agricultural Experiment Station, Oregon State University, Corvallis, Oregon, March 1974.

Objectives and Hypotheses. The purpose of the study was to: 1) develop a model of a health industry in the Northwest that would provide a means of estimating interrelationships between public expenditure, environmental, and economic variables, and the health status of the community; and 2) estimate interrelationships between these variables and availability of physicians. Specific objectives of this study were to a) develop a conceptual framework which would relate health to the population of Oregon, Washington, and Idaho to environmental, social and economic factors, b) examine empirically the contribution of these factors to health status of the population of this region, and c) identify policy variables in health resource allocation in the region.

It was hypothesized that health status of a county in the Northwest and number of doctors available to the inhabitants is a function of geographic, demographic, medical, and economic variables.

Procedures. The work is couched in terms of economic theory, principally the theoretical constructs of welfare economics leading to Pareto optimality. The author developed a health index, a means of quantifying monetary loss to each county from mortality. The index is the present value of services foregone as the result of mortality, divided by human capital inventory of a county. The human capital inventory is the present value for each sex-age group multiplied by number of inhabitants in the sex-age group. The health index of a county is number of sick days times the average income per person, times incidence of illness summed over relevant ranges, divided by human capital inventory of the county.

The econometric model used presupposes some interdependence between the community's health status, availability of doctors, and income of that community. Hence, a two stage least squares method of analysis was used. The econometric model includes three equations, the production of health equation, a doctor availability function, and an income generation function.

Outcomes and Conclusions. One of the results highlighted by the author was a negative relationship between population concentration and health status. He implied that advances in medicine may be partially or totally offset by negative effects of urbanization, such as air pollution, lack of exercises, tensions of urban life, and so on.

The author found a positive relationship between migration and health status and a negative relationship between the over sixty-five group and the health index, leading to a cautious statement of a hypothesis that there may be stages of development of a region which have a direct effect on health status of the community. The community in its early stages of development has an influx of dynamic, aware people who contribute to growth of that community more than they receive. As the community reaches a certain level, detrimental effects of past economic growth are realized. Conditions deteriorate as well as health of inhabitants.

Percent employed in manufacturing and farming may be related to health status of the community. Ignoring the accident rate, it appears that farmers and principally logging and fruit processing workers are healthier than those persons in more sedentary lines of work.

The medical care variables of one doctor per hundred inhabitants and one paramedic per hundred inhabitants both showed a positive and significant relationship with the health status of the county, which implies that mortality rates could be reduced with an increase in physician to population ratio or through substituting for physicians with pharmacists, nurses, or other paramedical personnel.

The author concluded the following. First, crowding of our population in metropolitan areas not only harms the natural environment, but also harms the

health of its populants. Second, social objectives of higher education, eradication of poverty, and better health are quite complementary. The annual marginal value product of a doctor in the Northwest was estimated to be \$35,511.00 per number year, i.e., it would save the Northwest this amount in economic loss if an additional doctor were employed. The marginal value productivity of a paramedic in the Northwest was \$12,518.00 per year. In both cases, the marginal value productivities vary among the states for both physicians and paramedics, and for hospitals. The average annual gross earnings of a physician in the Northwest was \$67,396.00, hence, the marginal value product is less than the marginal factor cost. Therefore, it would be difficult to attract doctors to the Northwest. The main problem appears to be maldistribution of doctors, as the marginal value product of physicians in Idaho is in excess of \$70,000.00.

Texas

21. Eigel, Felicitas, and Wayne H. Oberle, "A Comparative Description of the Leaders of Four Central Texas Towns," working paper, Department of Agricultural Economics and Rural Sociology, Texas A & M University, College Station, Texas, 1973.

Objectives and Hypotheses. The general objectives were to describe and compare selected characteristics of the economic and noneconomic leaders of small towns and to describe and compare perceptions which economic and noneconomic leaders have of selected attributes of the locality.

Hypotheses predicted differences between economic and noneconomic leaders in personal attributes, organizational affiliations, and attitudes. Also, differences in organizational-leader linkages were hypothesized by town size.

Study Area. Two sets of two rural towns in central Texas, with a population between 5,000 and 10,000, associated with the same regional planning council.

Procedures. Key position holders were interviewed. Individuals named at least twice as leaders were interviewed, this snow-ball technique was followed until all people named at least twice were interviewed.

This procedure yielded 121 leaders in the 4 towns. The focus was on bases and consequences of power of economic and noneconomic leaders. This tentative analysis utilized tabular analysis, showing number and percentage of respondents, classified by economic and noneconomic leader and by town. Hypotheses were tested using frequency of responses to various questions asked.

Outcomes and Conclusions. Leadership types were nearly evenly divided between economic and noneconomic in each of the four towns. Economic leaders and noneconomic leaders have similar sources of income but the mean net yearly income, mean occupational status, and mean years of residence of

economic leaders is higher than that of noneconomic leaders. Economic leaders felt that 24 percent of the families in the county actually attained their individual estimates of a minimum adequate annual income, while noneconomic leaders judged that only 13 percent of the families in the county actually attained their individual estimates of a minimum adequate income. Based on the mean number of problems named, noneconomic leaders are more progressive than economic leaders in every problem area—cultural, financial-economic, human resources, organizational-interactional, and physical man-made facilities.

22. Oberle, Wayne H., and Kevin R. Stowers (Texas A & M University), "Regional Development in Diagnostic Perspective," paper presented at the annual meeting of the Rural Sociological Society, Baton Rouge, Louisiana, August 1972.

Objectives and Hypotheses. The paper explores several hypotheses which stem from the general proposition that economic well-being of the residents of a county is related to the amount of extra-local financial and organizational resources to which the county has access. Regional Councils of Governments, Economic Development Districts, Resource Conservation and Development Projects, and Community Action Agencies are regional development organizations which have been active for several years but less than a decade.

The overall objective was to determine whether regional development organizations have been operative long enough to have a local effect.

Hypotheses were: 1) counties with more regional development structures located within them have residents with higher per capita income (the dependent variable) than counties which lack such regional development entities, 2) based on the assumption that regional councils such as Councils of Governments offer great potential for a more effective utilization of various types of scarce resources, the county's regional council membership is also positively related to the dependent variable, per capita income, 3) since federal grants can inject a host of extra-local money into the region and planning offers a basis for optimism in terms of a more effective utilization of scarce resources, the total and the per capita value of the planning projects reviewed by regional councils are key intervening variables, and 4) county population is not an important independent or intervening variable.

Study Area All (N=99) nonmetropolitan (in 1970) Texas counties which had at least one place (i.e., town or city) which met the following criteria. 1) had 5,000 to 49,000 residents in 1970, 2) was incorporated in 1970, 3) had one or more business establishments which had a Dun and Bradstreet credit rating in 1970, and 4) had one or more banks in 1970.

Procedures. Correlation and Student's *t* techniques were used.

Outcomes and Conclusions. The first two hypotheses were not supported, the third was generally not supported, and the last was generally supported.

The multiplicity of extra-local interorganizational field, as fairly directly measured by the total number of regional development structures having jurisdiction in the county, was found to be negatively related to per capita income, but positively related to per employee wages paid. The multiplicity of the extra-local interorganizational field, as at least indirectly measured by total per capita value of planning projects reviewed by the regional council that has planning jurisdiction in the county, was not directly related to the general economic well-being of the county's residents.

23. Oberle, Wayne H., Kevin R. Stowers, and James P. Darby (Texas A&M University), "A Definition of Development," *Journal of the Community Development Society*, Spring 1974.

Objectives and Hypotheses. The purpose of the paper was to present and then discuss a proposed definition of development (i.e., a process in which increasingly more members of a given area or environment make and implement socially responsible decisions, the probable consequence of which is an increase in life chances of some people without a decrease in life chances of others) and two advantages it offers as a first step toward a useful theory of development.

Although no hypotheses were stated, the paper described a socially responsible decision-maker and gave examples of structural conditions which simultaneously advance private and public welfare.

Procedures. This paper was based upon a critique of information obtained in the entries incorporated in Wayne H. Oberle, *A Bibliographical Guide to Structural Development*.

Outcomes and Conclusions. The authors asserted that a paradox exists in that scientists recognize a need for a general theory of development without explicitly defining it.

They also asserted that the paradox can be resolved by a definition of development which links orientations of three disciplines - economics, sociology, and ethics.

Two advantages were cited for the above definition of development. 1) it aids a focus on the immediate and subsequent effect(s) which behavior had on the individual decision-maker and on the social structure of which he is a part, and 2) it provides a basis for an orientation which encourages identification of individual behavior and structural conditions that simultaneously advance private and public welfare.

24. Preston, James D., and Patricia B. Guseman, *The Development of Multi-County Regions in Texas*, Departmental Information Report 71-10, Department of Agricultural Economics and Rural Sociology, Texas A&M University, September, 1971.

Objectives and Hypotheses. The purpose of this publication was to provide descriptive information about programs operated at a regional level in Texas.

Procedures Thirty-seven maps, each illustrating the regional boundaries of a separate organization, are reprinted. There is, in addition, a general description of the organization, a statement of the purpose of the regions, the criteria for defining the areas, and the rationale of organization and planning efforts.

Outcomes and Conclusions. The purposes listed by various agencies in encouraging or implementing multicounty areas were to 1) comply with federal and state regulations, 2) fulfill local interests, 3) enable agencies to receive federal and state funding, 4) facilitate administration, 5) localize services from a state-wide to an areawide base, 6) overcome overlapping and independent efforts, 7) alleviate specific problems, and 8) overcome outdated means of coping with many diverse problems.

Three basic activities emerged encompassing responsibilities of many organizations. economic development, the provision of social services, and natural resource conservation.

Among the criteria organizations used for defining areas was protection of existing political boundaries. Typological and climatic characteristics were particularly important for some organizations, the central place or trading center, as a means of clustering people, institutions, and services, was also used. Of secondary importance were social and ecological factors.

The arena within which planning occurs, whether primarily at the local, state, or federal level, is an important variant factor, for the type of sponsoring agency is associated with the extent of local participation.

There is an increasing growth in areawide decision-making and coordination. Still, there are many problems of overlapping functions and fragmentation of efforts at the area level. Special districts (e.g., water) perform functions local governments are able to accomplish. Here too there has been little coordination among area programs or between other agencies and area efforts.

25. Preston, James D., Danette Spiekerman, and Patricia B. Guseman, "The Identification of Leadership in Two Texas Communities. A Replication of the Bonjean Technique." *Sociological Quarterly*, Volume 13, No. 4, Autumn 1972, pp. 508-515.

• *Objectives and Hypotheses.* The paper described a replication of the Bonjean technique of identifying community leaders. Also, specific community characteristics were examined in relation to leadership viability.

Study Area. The study area consists of two communities given pseudonyms of Oiltown and Farmersville with populations of 11,000 and 9,000, respectively. The towns are extremely different. A high percentage (74%) of Farmersville's population is Spanish-Surname, while Oiltown has only 4%. Oiltown has few employed in agriculture, while Farmersville has over one-third in this occupation. The towns are generally opposite one another on occupational mobility, metropolitan influence, and population increase.

• *Procedures.* Top leaders were delimited by a two-step reputation technique. First, a list of leaders was obtained from a panel of informants in the community, and second, top nominees were asked to choose individuals whom they perceived to be leaders.

Outcomes and Conclusions. High visibility of leadership, as distinguished by both key leaders and other informants, was sustained for both Oiltown and Farmersville. The results indicated that the characteristics which differentiated these communities did not appear to provide an adequate basis for explaining similarity of leadership visibility.

Three classes of leaders were defined. Concealed leaders were those individuals who had been assigned a substantially higher rank by key influentials than by lower-ranking influentials. Symbolic leaders were individuals who had been assigned a higher rank by lower-ranking leaders than by key leaders. Visible leaders were those who had been assigned approximately the same rank by both key influentials and lower-ranking influentials.

In the smaller, self-contained communities, Oiltown and Farmersville, leadership was overt and highly visible to all residents. In the more rural and more isolated communities, the power structure was concentrated and visible. The concealed leader probably exists only in urban areas where the typical community member is less knowledgeable concerning community leadership.

Bonjean's technique for refining and more accurately delineating community power appears to be a highly successful device when applied to larger, more complex communities in which simultaneous recognition of top leadership by both key leaders and lower-ranking leaders is often widely divergent. However, it seems likely that its use will be less applicable in relatively small communities where leadership is often highly overt, that is, where residents may perceive leadership structure as accurately as do key leaders.

Utah

26 Albrecht, Stan L., "Rural Development. Its Dimensions and Focus," working paper, Department of Sociology, Utah State University, 1972.

Objectives and Hypotheses: No objectives were formally stated. The paper was developed as a general treatise on the subject of rural development.

Procedures: The first part of the paper is a review of literature on rural development and its evolution as a popular concept. The second major element of the paper is a report of the general outcome of a survey of people in three rural counties, Piute, Wayne, and Beaver counties, as compared to residents of a more urbanized area, valley communities of Salt Lake County. Data used in the study were obtained in a random sample of respondents, 303 from the rural areas and 173 from the urban areas. Questions included were those dealing with choice of residence and factors that were most attractive and least attractive about the individual's community. Analysis was based on percentage distributions of respondents.

Outcomes and Conclusions. The author appeared to adopt the Utah State University's task force definition of rural development, which is. development is said to occur when affected choices of rural people are expanded by development activities. Some of these activities are 1) an increase in per capita real income; 2) an improvement in distribution of income and wealth; 3) an improvement in mobility of resources, human and nonhuman, thus permitting more adequate response to superior alternatives that become available, 4) an improvement in the structure and process of community organization that results in a quantitative or qualitative enhancement of public services supplied to rural people; and 5) any increase in a quality of life index as perceived by rural people. Rural development in this context would occur if conditions for those who stay behind are improved or if mobility and thus opportunities of those who wish to leave are enhanced.

The paper traces evolution of growing federal concern with rural development from the time of President Theodore Roosevelt and his Country Life Commission through to the programs proposed by Ex-President Nixon.

From data gathered by personal interviews, several observations were possible. From 74 percent to 80 percent of rural residents indicated satisfaction with living in their community, while 42 percent of urban respondents indicated they were satisfied. Fifty-one percent to 93 percent of the rural residents selected their own area for the place they would most like to live, 45 percent of the urban residents selected their own area. The rural residents indicated by a 50-percent to 62-percent response that they would least like to live in the Salt Lake region. When asked what made their area most attractive, urban respondents indicated size of population and friendliness of people as well as access to outdoors and absence of polluted environment. Rural respondents listed access to

outdoors and open space as a major advantage to living in rural areas, while friendliness of people was a consensus item for all rural counties. Some rural respondents listed absence of adequate medical and health facilities as the most serious problem faced by their communities. Respondents in all three rural counties agreed there was a serious lack of job opportunities for young people and a need for better shopping facilities. Many persons in rural areas appear to choose not to migrate, even though they would profit financially, principally because they value nonfinancial factors more highly than do people in urban areas. In particular, personal relationships with friends in a small community setting are highly valued.

In summary, the author implied that the residential location decision is an individual decision based upon a number of factors. However, it appears that adequacy of service is an important factor to those living in either rural or urban settings and it would seem a minimum of ideal level of services should be provided to those communities.

27. Albrecht, Stan L., and Michael K. Miller, "Provision of Health-Related Services in Rural and Urban Areas," Utah State University, Agricultural Experiment Station, *Utah Science*, Volume 34, No. 3, September 1973.

Objectives and Hypotheses. The general objective of this article was to describe the level of health care utilization of access and adequacy of medical and health services and willingness to pay increased taxes to improve health care delivery.

Study Area. Principally Beaver, Piute, and Wayne counties and the Valley West communities of Salt Lake County, Utah.

Procedures. Most of the data reported in this publication were obtained in interviews of residents in the study area. Respondents were randomly selected and were questioned concerning health care utilization, adequacy of existing medical facilities, willingness to pay increased taxes for improved services, and attitudes toward paraprofessionals.

Analysis was in the form of frequency distributions and cross tabulation tables.

Outcomes and Conclusions. People in rural areas seemed much more willing to pay increased taxes to improve health and medical services than people in urbanized areas. Health care was also a priority item in the two primary rural counties as compared to all other kinds of public services, whereas law enforcement, pollution, schools and educational facilities and job opportunities were indicated as priority services to be supported by additional taxes in urban areas. The authors suggested availability of medical services does influence the medical behavior of individuals because over half of the people in the two predominantly

rural counties would have gone to the doctor more often if one had been more readily available. Nearly one-third of the people in the two rural counties indicated a need for medical services which were not received, as contrasted to approximately twenty-three percent in the other two counties. People in rural Beaver county who consulted a doctor usually believed it was absolutely necessary. The two predominantly rural counties rated their medical and health services as poor. One hundred percent rated them as poor in Wayne County and 96 percent rated them as poor in Piute County. Approximately 64 percent in Beaver County and 67 percent in Salt Lake County rated their medical services as being excellent or good.

Respondents in the principal rural counties were much more receptive to patronizing paramedical persons that were those in the urban areas. Eighty-seven percent in Wayne County, 83 percent in Piute County, and 91 percent in Beaver county were willing to go to paramedics.

Albrecht and Miller concluded that the medical profession and medical planners must continue to help rural communities solve their health and medical care problems, because these communities most often lack qualified manpower to plan, obtain support, and implement programs.

28 Miller, Michael K., "Toward a Measurement of the Adequacy of Health Services in Rural Utah," unpublished Master's thesis, Department of Sociology, Social Work and Anthropology, Utah State University, Logan, Utah, 1972.

Objectives and Hypotheses The objectives of the thesis were to 1) develop a measure of adequacy, quantitative and qualitative, of health services in rural Utah, with emphasis being given to the perception of adequacy from the consumer or public point of view, and 2) assess adequacy as perceived by the professional or provider and from the point of view of the United States Public Health Service public health methods.

Study Area: Wayne, Piute, and Beaver counties in Utah.

Procedures The measures of adequacy in this research were 1) populace perception of adequacy, 2) professional persons' perception of adequacy, and 3) public health service standards. Data collection procedures related to each of these adequacy measures. To obtain public perception and adequacy of services, prepared questionnaires were administered to a quota-random sample of individuals living in the three rural counties. There were 303 respondents to the questionnaire. The first section of the questionnaire consisted of 28 questions relating people's feelings toward various aspects of the community, including a rating of all public services, amenities, and opportunities. The second section included questions related directly to health services and health service utilization, including questions on frequency of visits to physicians and distance traveled to obtain adequate medical service. The third section of the questionnaire included 15 demographic questions.

The professional perception of adequacy in medical service was obtained by surveying medical doctors and dentists mentioned by public respondents. Physicians and dentists were asked to assess adequacy of medical services provided in their area and to respond to questions such as the necessity for national health insurance, and advisability of using paramedical support.

Adequacy was determined using the United States Public Health Service standards developed by this agency in 1942, but checked by the researchers using recent American Medical Association data.

Analytical techniques used were frequency distributions and cross tabulation tables.

Outcomes and Conclusions: From the data the author hypothesized that perception of when it is necessary to visit a physician varies according to availability of service, with those individuals with service more readily available visiting at an earlier stage of illness than individuals who must travel substantial distances to reach a physician. Based on the premise that people's willingness to pay additional taxes reflected their attitudes that these certain services should be improved, the author offers evidence that respondents in the two rural counties were most willing to pay additional taxes to have these services improved.

In contrast to the evaluation by the public, the professionals perceive the adequacy of medical services in rural areas to be at least adequate, with 44 percent of medical doctors rating services as excellent and 33 percent as good. Doctors of dentistry did not state services as excellent but 57 percent rated services as good.

Using the adjusted Public Health Service standard, researchers found that health services were inadequate in these three rural counties.

Washington

29. Dillman, Don A., (Washington State University), "Measuring Adequacy of Service: A Conceptual Problem," position paper prepared for the W-114 Technical Committee, 1972.

Objectives and Hypotheses: The main objective was to discuss some of the dilemma involved in conceptualizing what is meant by adequacy of service.

Procedures: The article is principally a conceptual exploration of service adequacy.

Outcomes and Conclusions: The author noted two kinds of judgment involved in establishment of standards for service adequacy. Expert judgment presumes knowledge of technique and possibilities for improved service not generally known to the public. Public judgment emphasizes the public's choice of needs of services. Both types of judgment have wide variations within their type (for instance, the knowledge of a general practitioner is different from that of a specialist). Both types also vary by relationship to the community system.

When measuring adequacy of service, either the delivery unit or the service outcome can be emphasized. Analysis of delivery units considers the existence of the service and the availability of the technology to offer a service. The service outcome viewpoint looks at the results of service delivery.

Several factors may hinder the provision of services. 1) delivery units may not exist. 2) delivery units may have inadequate technology. 3) technology may be inefficiently used; 4) recipients may not know about the service; 5) recipients may be unable to use the service because of pricing policies or discriminatory practices, and 6) recipients may not use the service to its fullest capacity.

In measuring adequacy of services, one must consider the issue of existence versus distribution of services. Existence is a very simple matter to deal with; is a certain service available? Analysis of distribution of services considers availability of the service to the population in relation to ethnicity, income, religion, lack of knowledge and information about the service, place of residence, time/distance from the service, sex, occupation, and social class.

Efficiency and effectiveness are very different concepts in discussing services. Efficiency refers to availability of the service at the least cost, while effectiveness refers to how well the service meets the needs of the people. Standards for a service may be based on an idealized service for socio-economic units.

Evaluation of service adequacy can be approached in two ways: 1) a standard may be set before the study, and 2) persons in need of services may be asked to judge the adequacy. The latter technique provides insights into willingness of persons to commit their energies and resources to develop various kinds of services, whether or not people might use a new service, and whether or not existing services are meeting needs.